Computational Modeling of Narrative Texts, Films and Games

Course 1 - Story and discourse

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Course outline

- Course 1: Story and discourse

- Course 2: Characters and agents

- Course 3: Time and space

- Course 4: Plot

Why study narratology ?

Academic disciplines, unlike people, usually don't have birthdays, but if one could be given to narratology, it would fall on the publication date of issue 8 of the French journal *Communications* in 1966. The issue contained articles by Claude Bremond, Gérard Genette, A. J. Greimas, Tzvetan Todorov, and Roland Barthes. (One of Genette's favorite stories is that Barthes's invitation to contribute to this issue was the incentive that resulted in his lifelong dedication to narrative.) In his contribution, "L'Analyse structurale du récit," Barthes wrote:

The narratives of the world are numberless. . . . Able to be carried by articulated language, spoken or written, fixed or moving images, gestures, and the ordered mixture of all these substances; narrative is present in myth, legend, fable, tale, novella, epic, history, tragedy, drama, comedy, mime, painting (think of Carpaccio's Saint Ursula), stained glass window, cinema, comics, news item, conversation. Moreover, under this almost infinite diversity of forms, narrative is present in every place, in every age, in every society. . . . Caring nothing for the division between good and bad literature, narrative is international, transcultural: it is simply there, like life itself. (1977, 79)

Story across media (Bremond)

[Story] is independent of the techniques that bear it along. It may be transposed from one to another medium without losing its essential properties: the subject of a story may serve as argument for a ballet, that of a novel can be transposed to stage or screen, one can recount in words a film to someone who has not seen it. These are words we read, images we see, gestures we decipher, but through them, it is a story that we follow; and it could be the same story.[1]

Story and discourse

- Narrator

- Viewpoint

- Narrative things

- Story (Fabula) things

- Discourse (Suzjet) things

- Inderjeet Mani : NarrativeML

- Red Riding Hood

- The fox and the crow

- The snowman

- Rashomon

- The big sleep

- Titanic

Story-telling (diegesis) and story-showing (mimesis)

- Audio and visual narrator

- Audio and visual focalizer

- Onscreen and offscreen action

- Onscreen and offscreen voices

- Internal/external narrator

What is a story ?

- Oxford English Dictionary: A narrative (or story) is any fictional or nonfictional report of connected events, presented in a sequence of written or spoken words, and/or in a sequence of (moving) pictures.

- Aristotle: A story (mythos) must have a beginning, a middle, and an end, and the events must causally relate to one another as being either necessary or probable. Stories arouse emotion in the psyche of the audience.

- Russian formalists: The fabula ("Story") is what happened in chronological order. The syuzhet ("Plot") is the sequence of discourse that was sorted out by the (implied) author. That is, the syuzhet consists of picking up the fabula events in non-chronological order; e.g., Fabula=<a1, a2, a3, a4, a5, ..., an>, Syuzhet=<a5, a1, a3>.

What is a story ?

- McKee: A story is a series of acts that builds to a climax which brings about absolute and irreversible change.
- Syd Field : a story is a three act structure. In the first act, the main character protagonist experiences a 'plot point' that provides a goal to achieve. In the second act, the character struggles to achieve this goal. The third act depicts the final struggle by the protagonist to finally achieve (or not achieve) his or her goal and the aftermath of this struggle.
- Barthes: a story is an exchange carried on by multiple voices, on different wavelengths.

What is a story ?

- Genette: in place of the two main traditional narrative moods, diegesis and mimesis, Genette contends that there are simply varying degrees of diegesis, with the narrator either more involved or less involved in the narrative, and leaving less room or more room for the narrative act.

- Torben Grodal: a story is a sequence of events focused by one (a few) living beings,   where "focused" means "mentally represented."

- Todorov: A story is composed of actions performed by characters, as perceived and told by a « narrator ».

What is a story ?

- Bremond: the registration of a change or continuation of the status quo ante. A story is a combination of narrative atoms, which are triads of goals, actions and outcomes.

- Hierarchical structure of stories within stories.

What is a story ?

Marie-Laure Ryan:

1. Story takes place in a world populated with individuated agents (characters) and objects. (Spatial dimension).

2. This world must undergo not fully predictable changes of state that are caused by non-habitual physical events: either accidents ('happenings') or deliberate actions by intelligent agents. (Temporal dimension).

3. In addition to being linked to physical states by causal relations, the physical events must be associated with mental states and events (goals, plans, emotions). This network of connections gives events coherence, motivation, closure, and intelligibility and turns them into a plot. (Logical, mental and formal dimension)

What is a story ?

- Forster:
- Not a story : King dies and queen dies
- Story : King dies then queen dies of grief
- Event causes Emotion causes Event ...

Emotions in Fiction

- Aristotle's *Poetics:* "the historian speaks of what has happened, the poet of the kind of thing that *can* happen"

- Fiction writers are PROGRAMMERS, whose programs are executed by the HUMAN MIND
  - Proust's programming language was French
  - Shakespeare's user interface was the GLOBE THEATRE

SUCH STUFF *as* DREAMS

The Psychology of Fiction
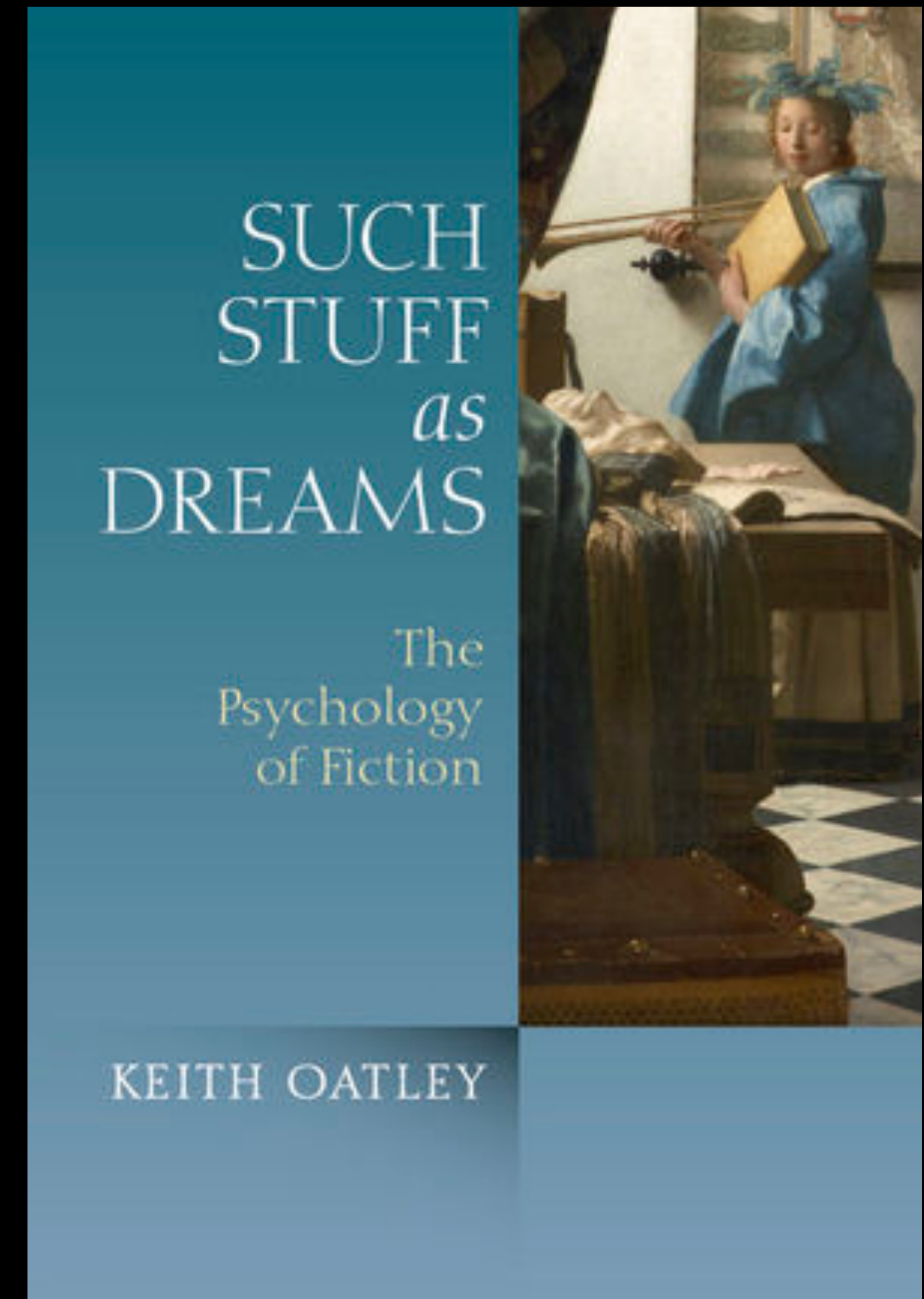
KEITH OATLEY

Keith Oatley on emotions

Oatley, K., & Johnson-Laird, P. N. (1987). Towards a cognitive theory of emotions. *Cognition & Emotion*, 1, 29-50.
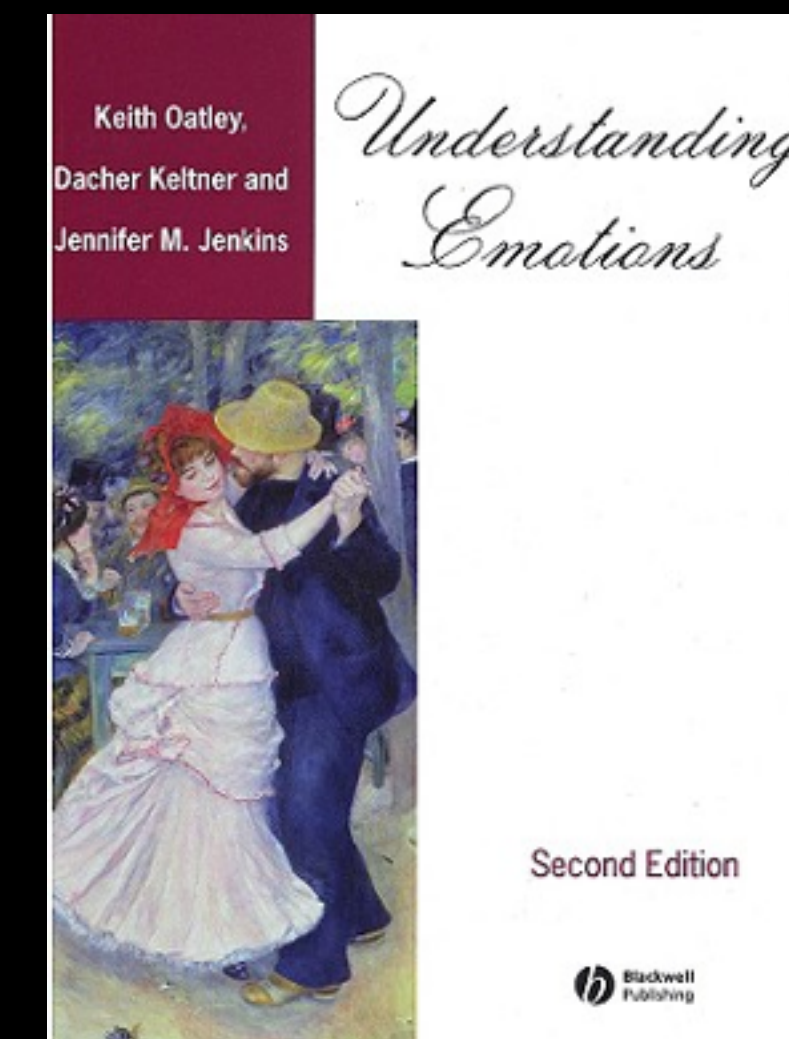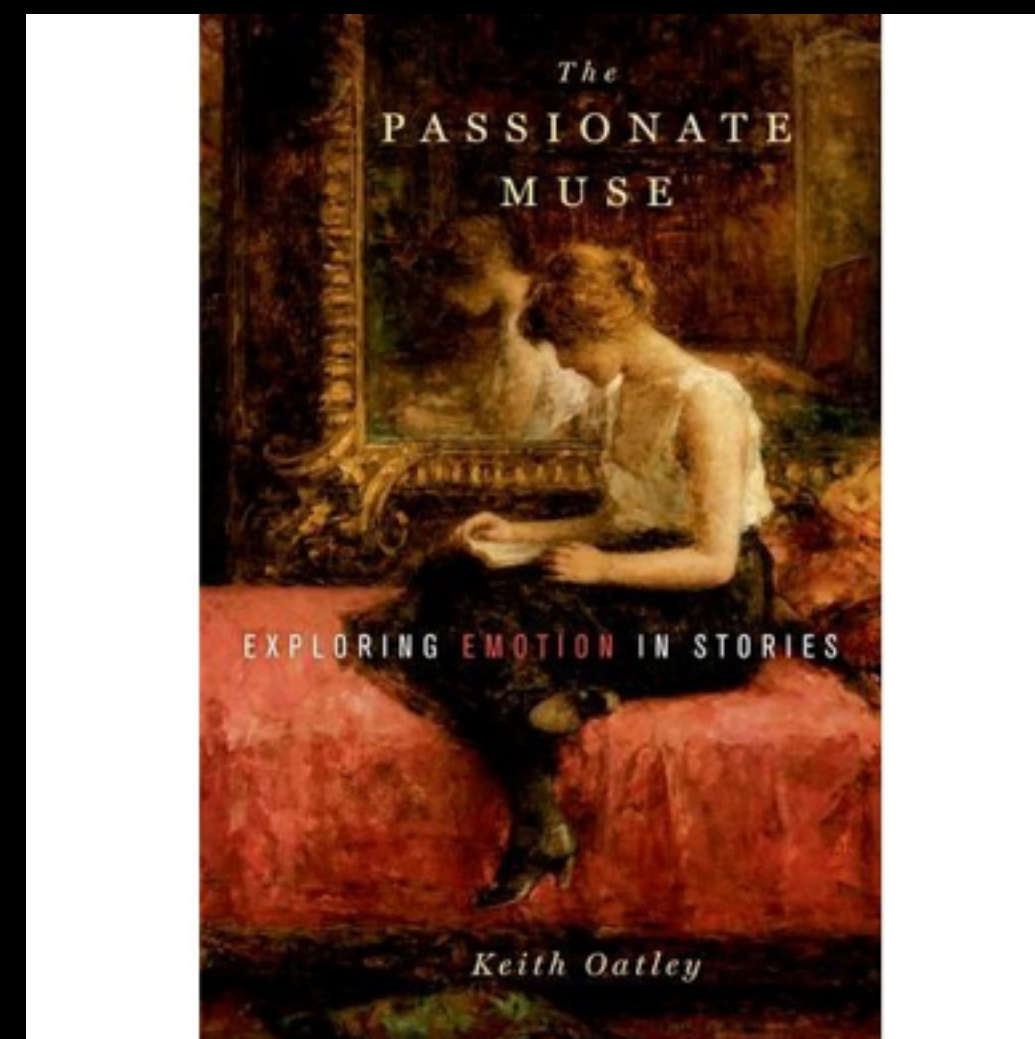
Oatley, K. (2008). The mind's flight simulator. *The Psychologist, 21,* 1030-1032.

Oatley, K. (2001). Shakespeare's invention of theatre as simulation that runs on minds. *Empirical Studies of the Arts, 19,* 27-45.

Analepsis and prolepsis

- What is commonly referred to in film as "flashback" and "flashforward." In other words, these are ways in which a narrative's discourse re-order's a given story: by "flashing back" to an earlier point in the story (analepsis) or "flashing forward" to a moment later in the chronological sequence of events (prolepsis).

- The classic example of prolepsis is prophecy, as when Oedipus is told that he will sleep with his mother and kill his father. As we learn later in Sophocles' play, he does both despite his efforts to evade his fate.

Example : Jacques the fatalist

- THE MASTER. — So you were in love, then?

- JACQUES. — Was I not!

- THE MASTER. — And because of a bullet shot?

- JACQUES. — Because of a bullet shot.

- THE MASTER. — You have never told me a word about it.

- JACQUES. — I dare say I have not.

- THE MASTER. — And why not?

- JACQUES. — Because it couldn't have been told any sooner or any later.

- THE MASTER. — And the time to tell of your loves has now come?

- JACQUES. — Who knows?

- THE MASTER. — Well, in any case, start on them.

- Jacques started the story of his love affairs. It was after dinner, the weather was sticky, and the master went to sleep. Night overtook them in the middle of the fields, and there they are, lost. There is the master in a terrible rage, falling on his lackey with a whip, and that poor devil saying with each blow: "That one, too, must have been written up yonder."

- You see, reader, that I am well on my way, and that it is completely up to me whether I shall make you wait one year, two years, or three years for the story of Jacques's loves, by separating him from his master and having each of them go through all the vicissitudes that I please. What's to prevent my marrying off the master and making him a cuckold? Shipping Jacques off to the islands? Guiding his master to the same place? Bringing them back to France on the same ship? How easy it is to fabricate stories!

Exercises

Answer the following questions:

1. What section of this excerpt contains reported speech in free indirect style?

2. Besides the narrative function, name two functions performed by the narrator. Is he distant from or involved in his narrative?

3. Why can we say that this narration is interpolated?

4. On what narrative level do we find the narrative of Jacques' love stories?

5. Is there an analepsis in this excerpt?

6. The first part of the excerpt (the dialogue between Jacques and his master) corresponds to what kind of narrative movement?

Smut's dilemma

[...] what exactly constitutes the "story" that is retold? Although it is plausible to say that the same story can be retold, it is difficult to say exactly what this means. The primary difficulty for proponents of the transposability thesis is to come up with an acceptable theory of story identity.[2]

Strict: Two tellings, t_1 and t_2, tell the same story iff the set of propositions true according to t_1 is the same as the set of propositions true according to t_2.[5]

Lenient: Two tellings, t_1 and t_2, tell the same story, S, iff there is a core set of propositions essential to story S true according to t_1 and true according to t_2.

Stories as generic entities

a few). As generic entities, these are then understood in terms of a set of conditions that an 'instance' of the entity must meet in order to be an instance of *that* entity. For example, it might be claimed that a musical performance is a performance of such and such a work if, and only if, it sounds like so and so. The musical work is a generic entity that demands that its instances sound a certain way.[14]

Stories as historical individuals

Stories come into existence: Unless we are tethered by some metaphysical constraints about abstract entities, it is not hard to be persuaded that stories come into existence. They are created by individuals when they are first told. The story of Romeo and Juliet did not exist before Shakespeare, and came into existence when *Romeo and Juliet* was written. Likewise *The Parable of the Sower* did not exist before Jesus uttered the relevant words.

Stories change through time: This is highly plausible, especially if we consider the folk tales and ballads of the oral tradition. As the story is passed on from one generation to the next, it changes in small (and sometimes large) ways as details are added and dropped. The development of the printing press has surely had a significant impact on story change, but change is still present even in the digital age. When the novelist drafts and re-drafts their book the novel changes and so does the story that is being told. Similarly, when a group of writers work on a series drama for television the story being told will undergo the radical change of growing considerably over time as new series are added.

Roland Barthes : Polyphonic stories

Roland Barthes' five narrative codes / voices

- 1. Hermeneutic (HER)

- 2. Proairetic (ACT)

- 3. Symbolic (SYM)

- 4. Cultural (REF)

- 5. Semantic (SEM)

ROLAND BARTHES
S/Z
AN ESSAY
Translated by Richard Miller
Preface by Richard Howard
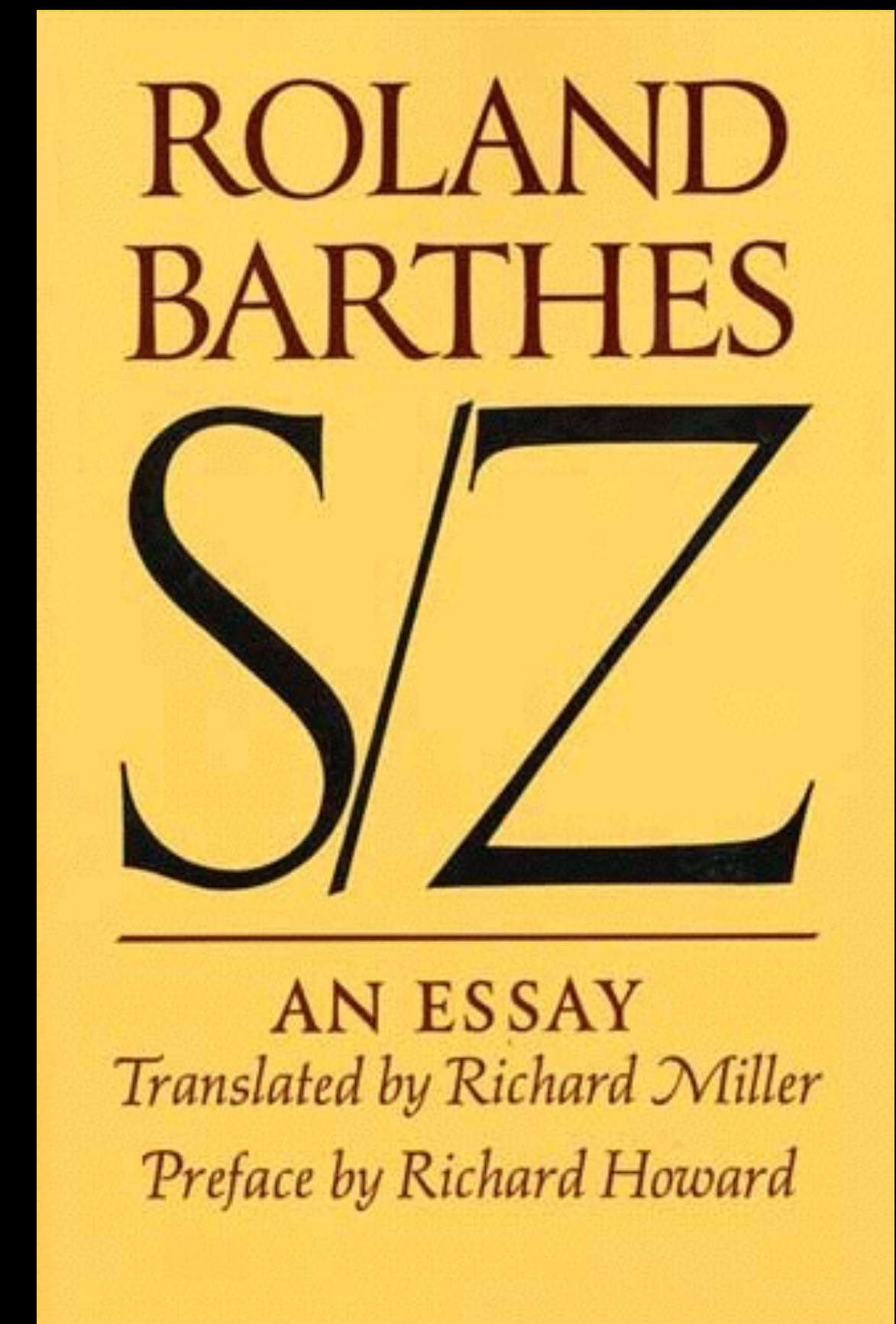
Hermeneutic code (HER): the voice of the truth

1. Thematisation. What in the narrative is an enigma?

2. Positioning. Additional confirmations of the enigma.

3. Formulation of the enigma.

4. Promise of an answer of the enigma.

5. Fraud. Circumvention of the true answer.

6. Equivocation. Mixture of fraud and truth.

7. Blocking. The enigma cannot be solved.

8. Suspended answer. Stopping the answering after having begun.

9. Partial answer. Some facets of the truth are revealed.

10. Disclosure of the truth.

Proairetic code (ACT): empirical voice

- The proairetic code contains sequential elements of action in the text.

- The proairetic code pictures the text as a location with spatial and temporal dimensions through which the reader moves.

Semantic code (SEM): the voice of the person

The Semantic Code refers to elements of the text that carry referential, extra-literal meaning.

Elements of the Semantic Code are called Semes.

Symbolic code (SYM): the voice of symbols

The Symbolic code refers to organized systems of semes.

When two connotative elements are placed in opposition or brought together by the narrator, they form an element of the Symbolic Code.

Cultural code (REF): the voice of science

The Cultural Code refers to anything in the text which refers to an external body of knowledge such as scientific, historical, and cultural knowledge.

Levi-Strauss : Binary oppositions

- masculine vs feminine

- light vs dark

- good vs evil

- self vs other

- subject vs object

- sacred vs profane

- body vs mind

- nature vs history

- positive vs negative

- heaven vs hell

- beginning vs end

- love vs hate

- pleasure vs pain

- existence vs nothingness

- left vs right

Rhetorics and narrative

- Aristotle described three "modes of persuasion," or « appeals." The first mode comes from the matter of the case (logos), the second mode comes from with the character of the speaker (ethos), and the third mode comes from the emotions of the audience (pathos).

- Each mode of persuasion can be inventional, helping an orator create an effective argument.

- Similarly, a narrator can tell an effective story.

Aristotle's Poetics

- Aristotle distinguishes between narrative genres in three ways:

- Matter: use of language, rhythm, and melody.

- Subjects/Agents: Aristotle differentiates between tragedy and comedy by distinguishing between the nature of the human characters that populate either form. Tragedy treats of serious, important, and virtuous people. Comedy treats of human "weaknesses and foibles ». Aristotle introduces here the influential tripartite division of characters in superior to the audience, inferior, or at the same level.

- Method: One may imitate the agents through use of a narrator throughout, or only occasionally (using direct speech in parts and a narrator in parts, as Homer does), or only through direct speech (without a narrator), using actors to speak the lines directly. This latter is the method of tragedy (and comedy): without use of any narrator.

Aristotle's Poetics

- Tragedy is a representation of a serious, complete action which has magnitude, in embellished speech, with each of its elements [used] separately in the [various] parts [of the play] and [represented] by people acting and not by narration, accomplishing by means of pity and terror the catharsis of such emotions.

Aristotle's Poetics

- The Tractatus Coislinianus is considered to be the « Lost Second Book of Aristotle's Poetics ».

- The manuscript now resides in Paris, France, at the Bibliothèque Nationale

- The tractates states that comedy invokes laughter and pleasure, thus purging those emotions (catharsis), in a manner parallel to the description of tragedy in the Poetics. It proceeds to describe the devices used and manner in which catharsis is brought about.

Topos

- Topos (τόπος, Greek 'place' from tópos koinós, common place; pl. topoi), in Latin locus (from locus communis), referred in the context of classical Greek rhetoric to a standardised method of constructing or treating an argument.

- The technical term topos is variously translated as "topic", "line of argument" or "commonplace."

- It is illustrated in the study of archetypal heroes and in the theory of The Hero With A Thousand Faces (1949), a book written by modern theorist Joseph Campbell.

- The biblical creation myths and "the flood" are two examples, as they are repeated in other civilizations' earliest texts such as the Epic of Gilgamesh or deluge myth), and are seen again and again in historical texts and references.

Tropes and the periodic table of story

The chemistry of storytelling
THE PERIODIC TABLE OF DRAMATIC ELEMENTS
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Mike Jones - www.mikejones.tv
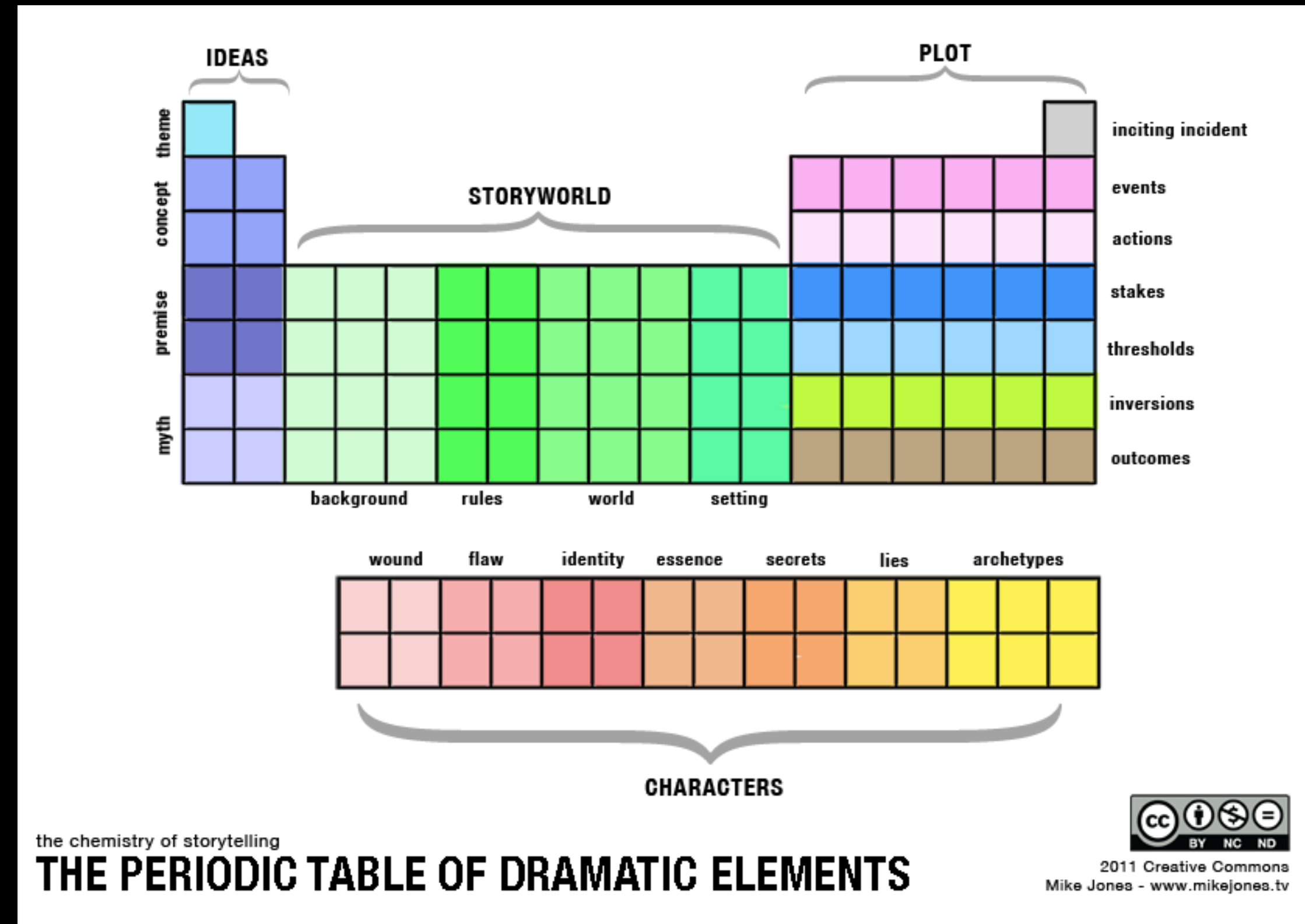
- Tropes are devices and conventions that a writer can rely on as being present in the audience's minds and expectations.

Story structure

- Simple story : beginning, middle and end

- Complex story : peripetia and incidents

- Story grammars

Propp : morphology of the Russian folk tale

- I. Member of family absents self from home:

- II. Interdiction announced:

- III. Interdiction violated:

- IV. Villain tries to meet:

- V. Villain receives information:

- VI. Villain attempts trickery:

- VII. Victim deceived:

- VIII. Villain harms family: A

- VIIIa. Member of family lacks or desires: a

- IX. Hero approached about lack: B

- X. Seeker decides on counteraction: C

- XI. Hero leaves home:

- XII. Hero tested: prepares for magical agent: D

- XIII. Hero responds to test of donor: E

- XIV. Hero gets magical agent: F

- XV. Hero transferred to object of search: G

- XVI. Hero and villain in direct combat: H

- XVII. Hero branded: J

- XVIII. Villain defeated: I

- XIX. Initial lack liquidated: K

- XX. Hero returns:

- XX. Hero returns:

- XXI. Hero pursued: Pr

- XXII. Rescue of hero from pursuit: Rs

- XXIII. Unrecognized, hero arrives home or other country: o

- XXIV. False hero: L

- XXV. Difficult task: M

- XXVI. Task resolved: N

- XXVII. Hero recognized: Q

- XXVIII. False hero exposed: Ex

- XXIX. Hero given new appearance: T

- XXX. villain punished: U

- XXXI. Hero marries and ascends throne: W

Greimas : actant model

1. The subject (for example, the Prince) wants or does not want to be conjoined with

2. An object (the rescued Princess, for example).

3. The sender (for example, the King) instigates the action.

4. The receiver (for example, the King, the Princess, the Prince) benefits from it.

5. A helper (for example, the magic sword, the horse, the Prince's courage) helps to accomplish the action.

6. An opponent (the witch, the dragon, the Prince's fatigue, a hint of terror) hinders it.

Genette : narrator and focalizer

- "We will therefore distinguish here two types of narrative: one with the narrator absent from the story he tells [...], the other with the narrator present as a character in the story he tells [...]. I call the first type, for obvious reasons, heterodiegetic, and the second type homodiegetic".
  In addition, if the homodiegetic narrator is the hero of the story, he/she is called autodiegetic.

- Genette distinguishes three kinds of focalization:

1. Zero focalization: The narrator knows more than the characters. He may know the facts about all of the protagonists, as well as their thoughts and gestures. This is the traditional "omniscient narrator".

2. Internal focalization: The narrator knows as much as the focal character. This character filters the information provided to the reader. He cannot report the thoughts of other characters.

3. External focalization: The narrator knows less than the characters. He acts a bit like a camera lens, following the protagonists' actions and gestures from the outside; he is unable to guess their thoughts.

Todorov on the narrator

- Narrator > Character

- Narrator = Character

- Narrator < Character

- Dramatic irony : the audience knows something the characters do not. As a result, the words of the characters take on a different meaning. This can create suspense or humor.

Dramatic irony examples

- In Romeo and Juliet, Romeo thinks Juliet is dead and the audience knows she is not.

- In Hamlet, we are aware that Hamlet knows the truth about his father's murder and that Hamlet is not mad.

- In King Lear, we know that Lear's most loyal daughter is Corelia and he can't see it.

- In Star Wars, Luke does not know Darth Vader is his father until Episode V, but the audience knows sooner.

- In Groundhog Day, the audience and Phil know that Groundhog Day is repeating but the other people do not know this.

Dramatic irony in Hitchcock

- The audience is longing to warn the characters on the screen: 'You shouldn't be talking about such trivial matters. There's a bomb beneath you and it's about to explode!'

- The shower scene in Psycho starts out with the character not hearing the killer because the water is running, but the audience knows he is there.

- In Rope, the audience sees the murder at the beginning of the movie. This fact adds to the humor in this movie in an ironic way.

Barthes: Writing degree zero

- First used to describe the « colorless » writing of Camus (the outsider)

- Published in Saint Hilaire de Touvet

- Borrowed from Danish linguist Viggo Brondal, whose favorite image of language is a geometry by which we turn the world into meaning and, in doing so, act upon both our own position and the structure of the world.

Verstraten : film narratology

- Audio narrator

  - is telling the story

  - sound focalization / microphone

- Visual narrator

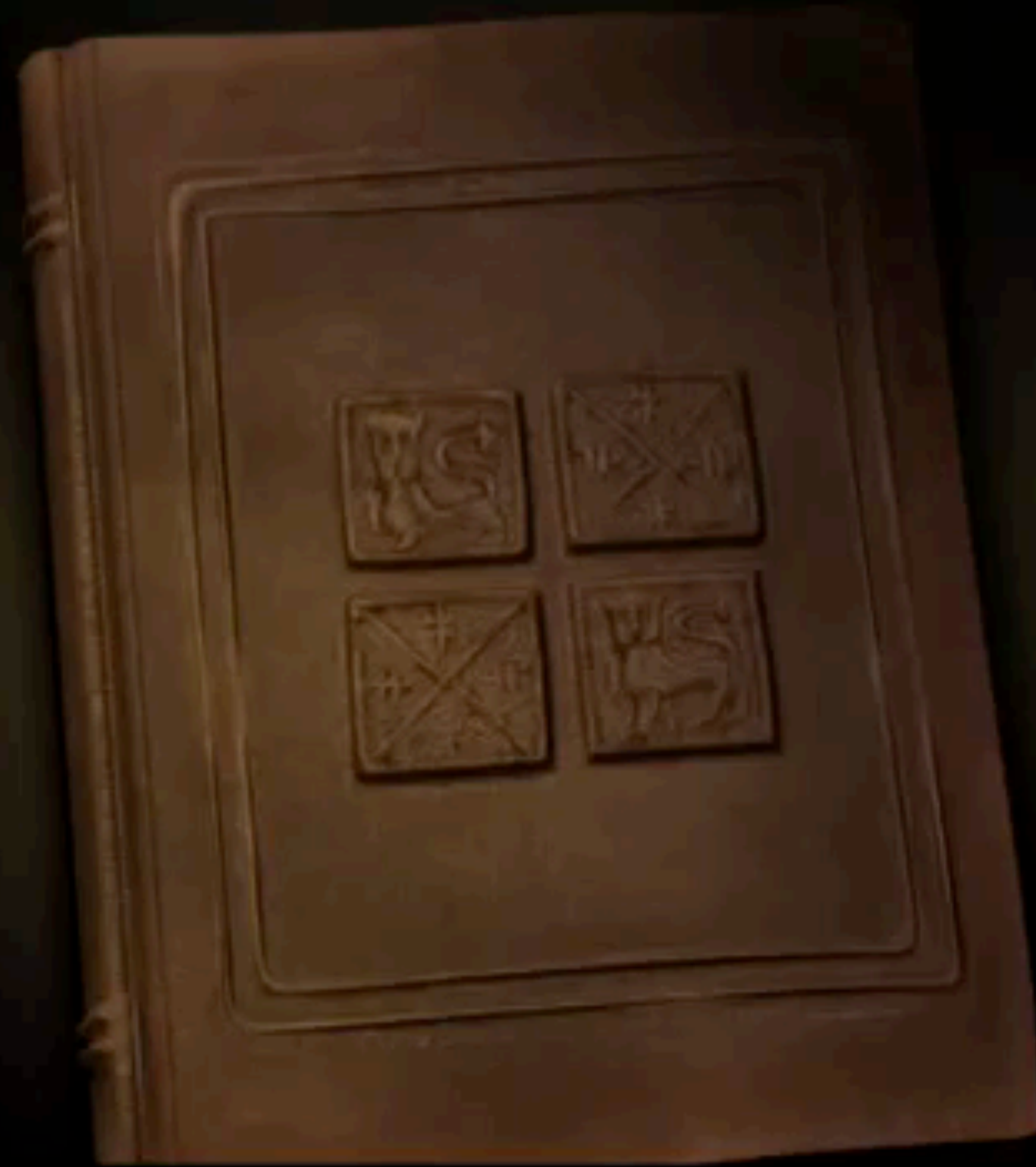 - is showing the story

  - visual focalization / camera

First person shots in movies
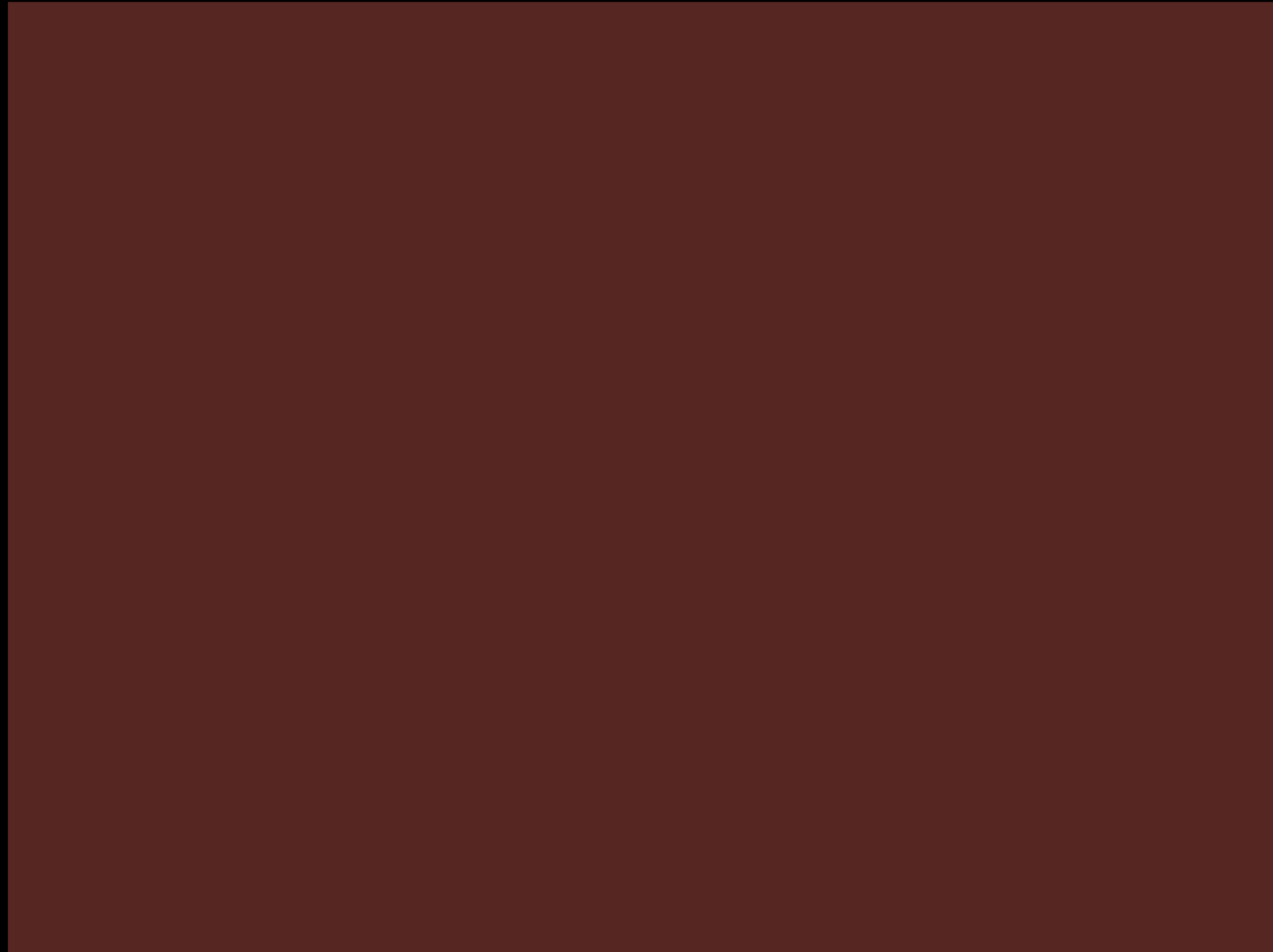
Second and third person shots

Story examples : Shrek 2

Story examples : Sunset boulevard

Story examples : Titanic

Story examples : Vertigo

Story examples : The big sleep

Story examples : The searchers

Interactive stories : first-person games

- Games experienced from a single point of view

- Since they utilize storytelling conventions of narrative, character, and theme -- can they be seen as examples of electronic literature?

New Media as Story, Performance, and Game

Interactive stories : second-person games

- In these games and playable media it is "you" who plays the roles, "you" for whom the story is being told

  - Dungeons & Dragons and other RPGs

  - Choose Your Own Adventure books and games

  - Kim Newman's novel Life's Lottery

SECOND PERSON

Role-Playing and Story in Games and Playable Media

Edited by Pat Harrigan and Noah Wardrip-Fruin

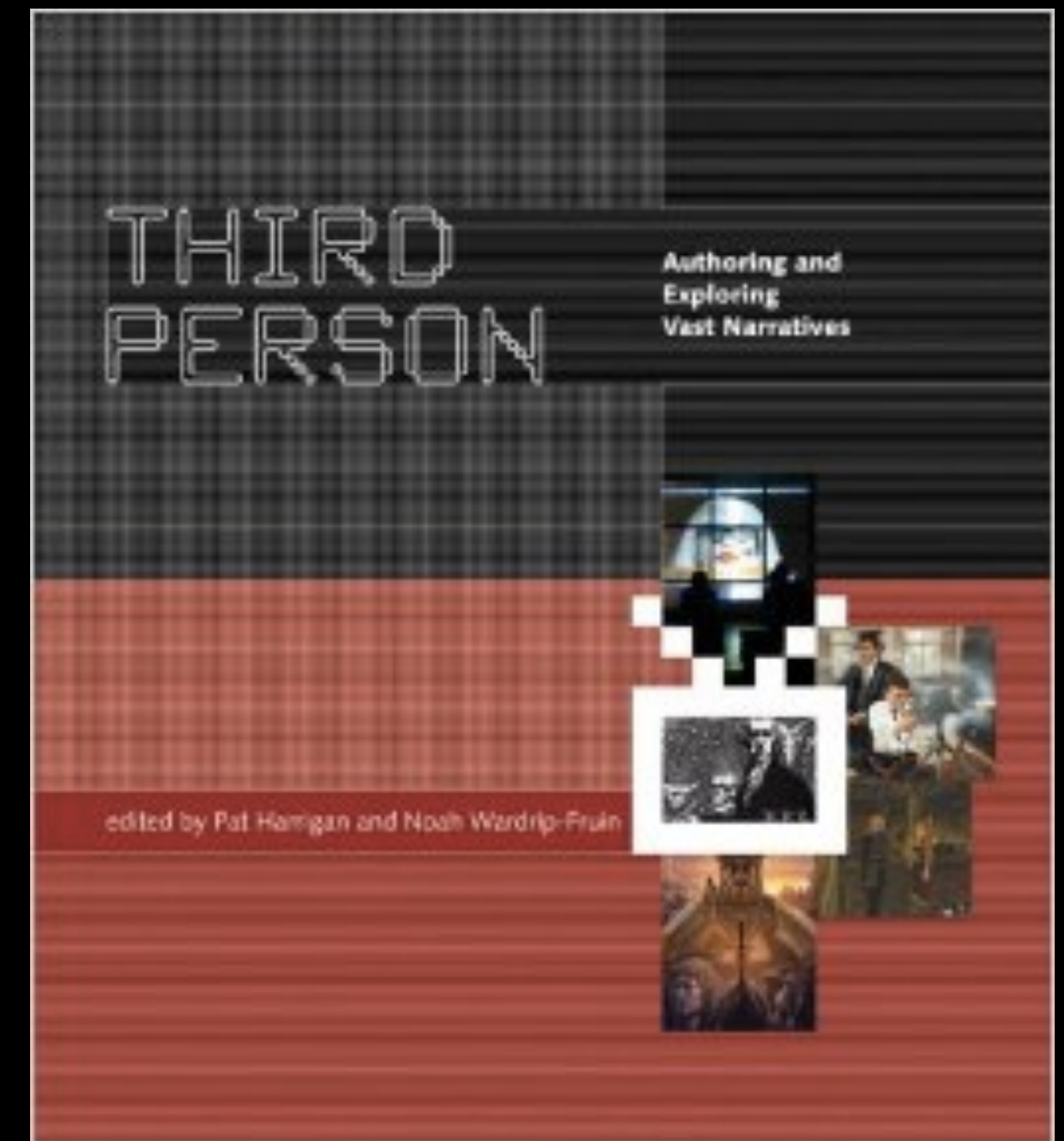Role-Playing and Story in Games and Playable Media

Interactive stories : third-person games

- Games experienced from multiple points of view (unchartered)

- The ever-expanding capacities of computing offer new narrative possibilities for virtual worlds with intricately developed storyline, many characters, and multiple settings

Authoring and Exploring Vast Narratives

Game examples : Far Cry 4

- Hidden in the towering Himalayas lies a country steeped in tradition and violence. You are Ajay Ghale, returning to the country of your birth, the lush forests and harsh snow capped summits of Kyrat, to fulfill your mother's dying wish of spreading her ashes.

- This vast and unpredictable country offers visitors opportunity and danger. You quickly find yourself caught up in a rebellion to overthrow the oppressive regime of Pagan Min, a figure known as much for his sense of style and charisma as for his cruelty and naked brutality.

- Navigating the treacherous landscape, you find your fate increasingly determined by the choices you make because in Kyrat, every second is a story.

Game examples : Heavy Rain

- The hunt is on for the Origami Killer, named after his calling card of leaving folded paper shapes on victims. Four characters, each with their own motives, take part in a desperate attempt to stop the killer from claiming a new victim.

- You assume the role of multiple characters, with very different backgrounds, motivations and skills, in a world shaped by Bending Storylines - a dynamic narrative design where your actions and decisions will shape your story.

Game examples : The last of us

- 20 years after a pandemic has radically changed known civilization, infected humans run wild and survivors are killing each other for food, weapons; whatever they can get their hands on.

- Joel, a violent survivor, is hired to smuggle a 14 year-old girl, Ellie, out of an oppressive military quarantine zone, but what starts as a small job soon transforms into a brutal journey across the U. S.

Game examples : Beyond Two Souls

- Live the life of Jodie Holmes, a young woman who possesses extraordinary powers through a psychic link to an invisible entity.

- Experience the most striking moments of Jodie's life as your actions and decisions determine her fate.

- As she traverses the globe, Jodie will face incredible challenges against a backdrop of emotionally-charged events never before seen in a video game.

Game examples : Remember Me

- Neo-Paris. 2084. Personal memories can now be digitized, bought, sold and traded. The last remnants of privacy and intimacy have been swept away in what appears to be a logical progression of the explosive growth of social networks at the beginning of the 21st century.

- The citizens themselves have accepted this surveillance society in exchange for the comfort only smart technology can provide. This memory economy gives immense power over society to just a handful of people.

- Remember Me is a 3rd person action adventure where players take on the role of Nilin, a former elite memory hunter with the ability to break into people's minds and steal or even alter their memories.

- The authorities, fearful of her knowledge and capabilities have arrested Nilin and wiped her memory clean. After her escape from prison, Nilin sets out on a mission to recover her identity, helped by her last and only friend. This search for her past leads to her being hunted by the very people that created this surveillance society.
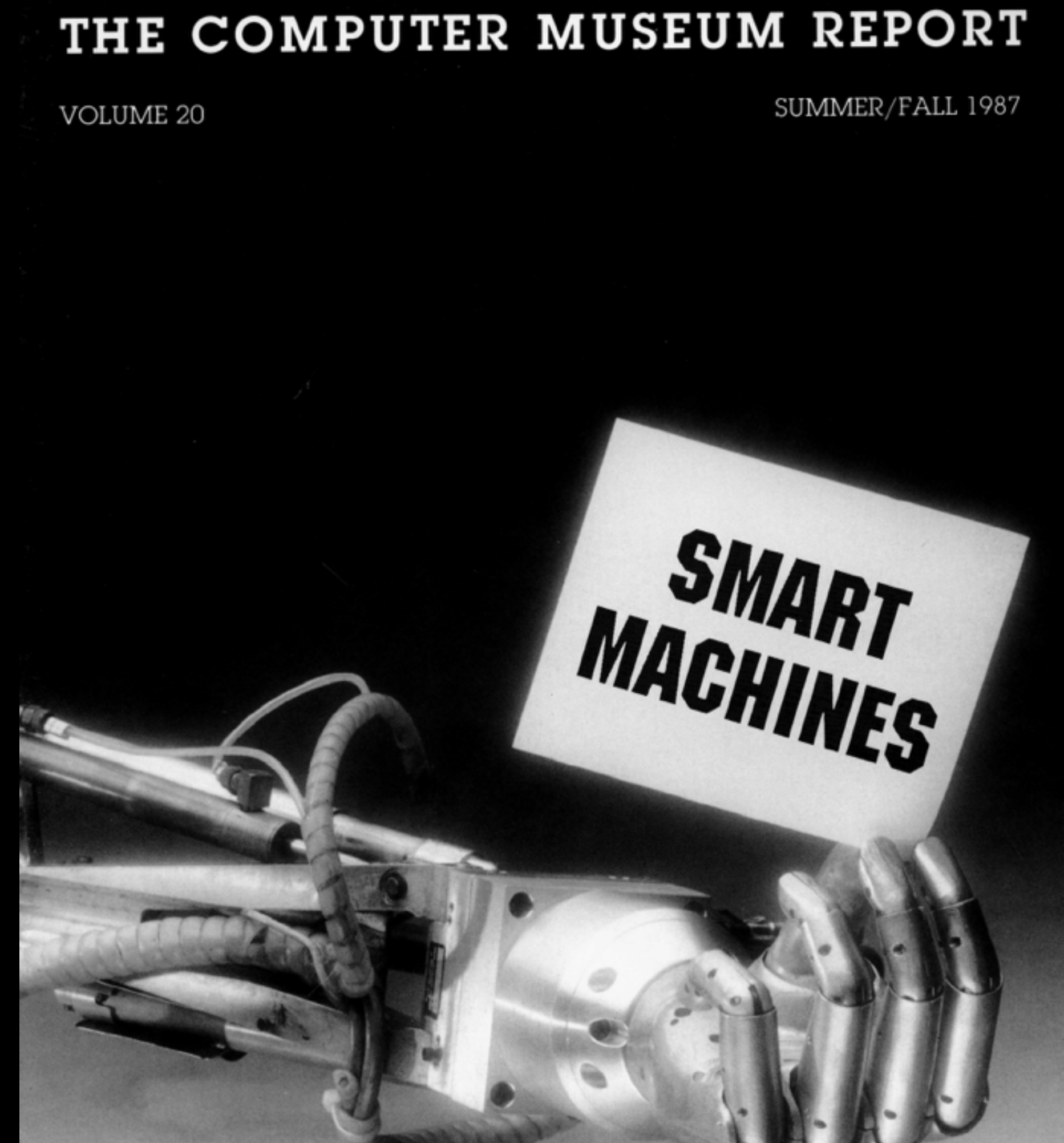
Can a computer generate stories ?

- Meehan : Talespin

- Lebowitz : Universe

- Nick Montfort : Curveship

- Richard Evans : Versu

- Michael Mateas : Facade

- Nicolas Szilas : IDTension

Meehan : Talespin

- The Metanovel: Writing Stories by Computer, 1976

SMART MACHINES

Michael Lebowitz : Universe (1983)

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Nick Montfort : Curveship
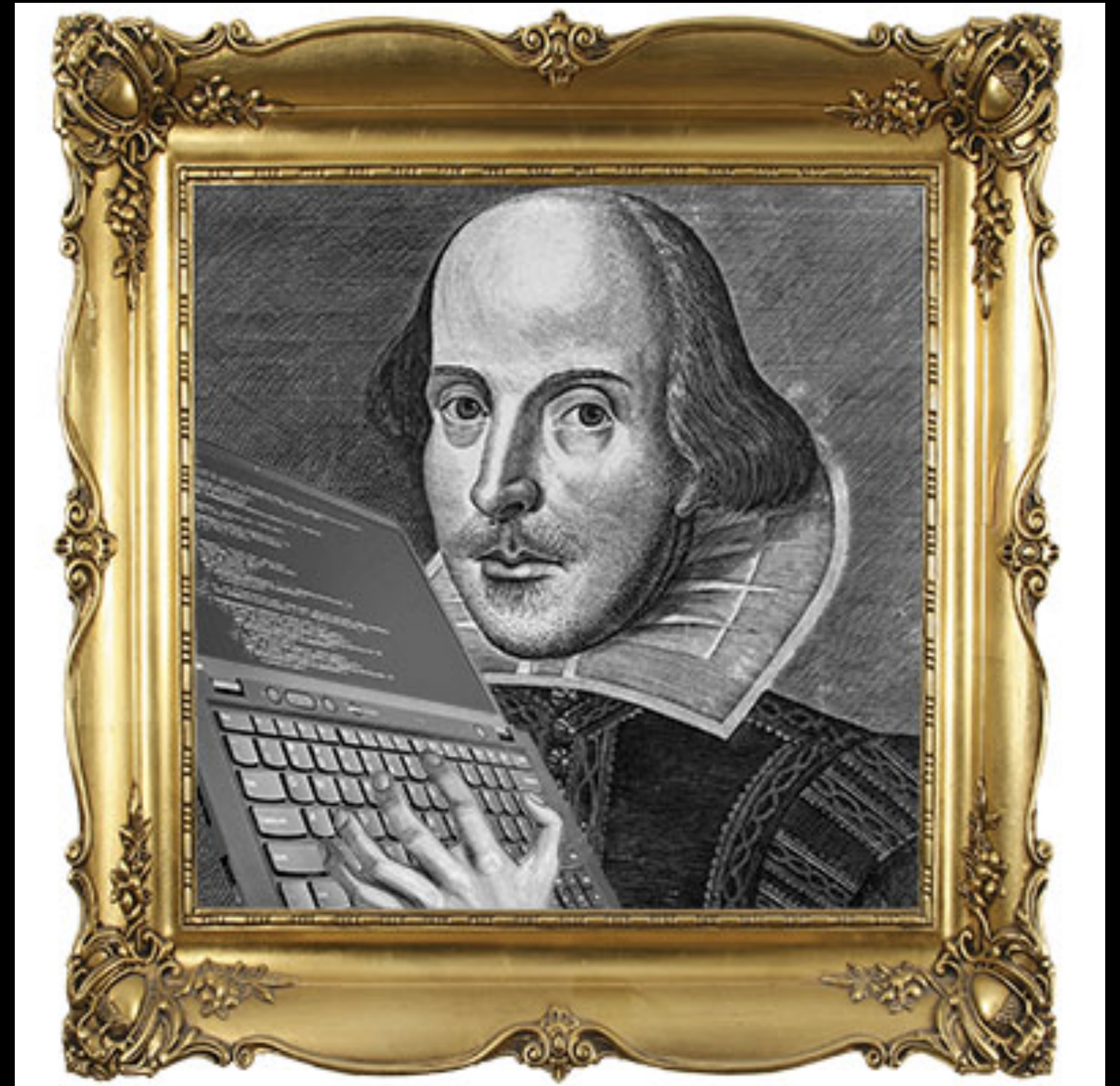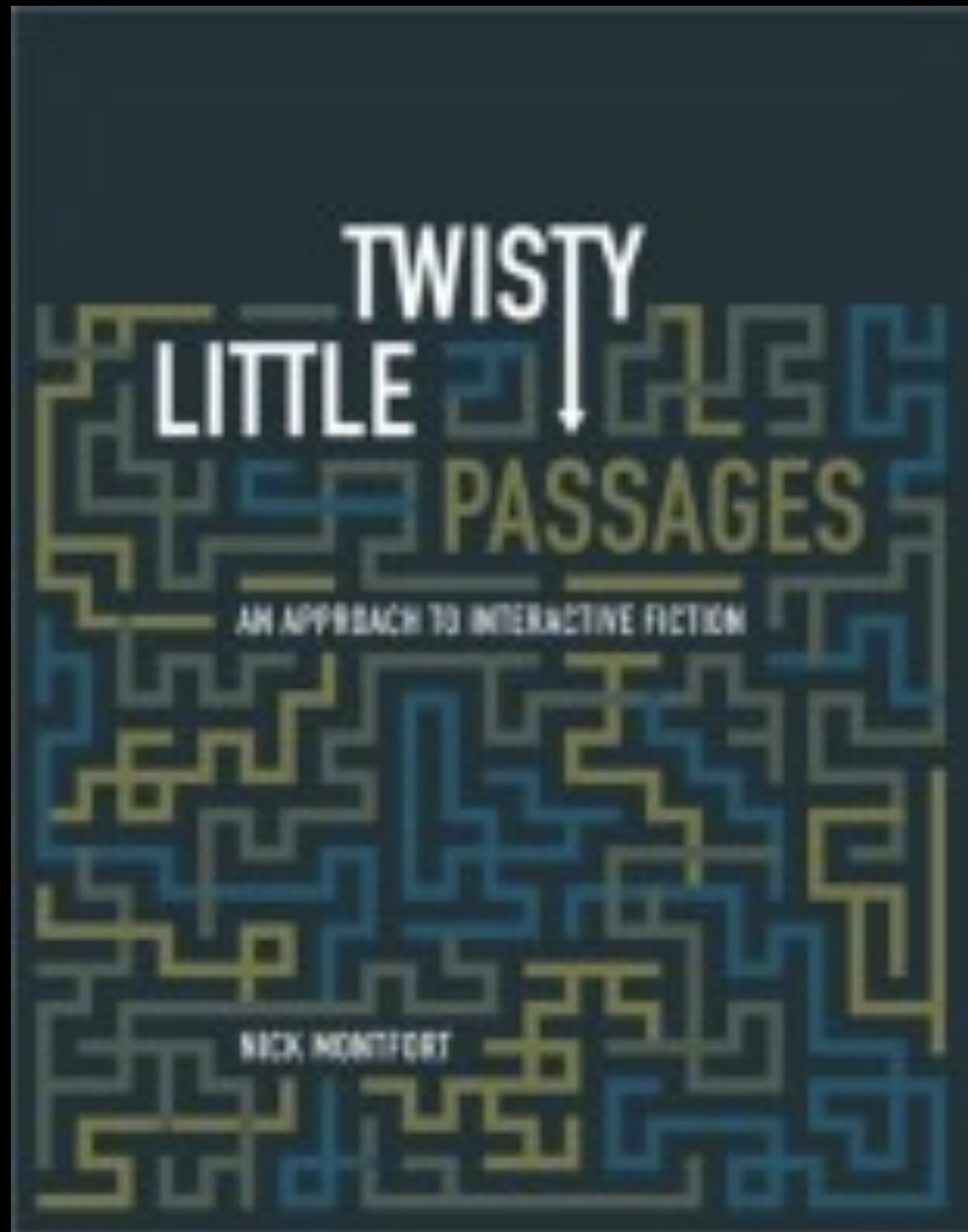
Richard Evans : Versu

Michael Mateas : Facade (2003)

FACADE by Mateas and Stern

Nicolas Szilas : IDTension (2004)

Next week : characters and agents